Application No.: 10/828,258

**AMENDMENTS TO THE CLAIMS** 

This listing of claims will replace all prior versions and listings of claims in the

application:

**LISTING OF CLAIMS:** 

1. (currently amended): A UWB ultra wide band receiver comprising:

<u>a plurality of at least one</u> communication modules with [[a]] limited working band bands

whose on/off state states can be controlled;

wherein the UWBultra wide band receiver is adapted to detect power intensity of a

received radio signal in the limited working band based on an on/off states of said plurality

of at least one communication modules, and

wherein the UWBultra wide band receiver is adapted to control the on/off states of the at

plurality of <del>least one</del> communication modulea based on a result of the detection[[.]],

wherein the said plurality of communication modules are a plurality of band stop filters

or plurality of small signal amplifiers.

2. (currently amended): The <del>UWB</del> ultra wide band receiver of claim 1, wherein the

detected power intensity corresponds to a band that comprises a frequency at which interference

is expected.

3. (currently amended): The <del>UWB</del> <u>ultra wide band</u> receiver of claim 1, further

comprising:

a baseband controller adapted to control the on/off states of said at least one plurality of

communication modules, to detect the power intensity of the radio receive signals, and to control

the on/off states of the plurality of said at least one communication modules.

2

Application No.: 10/828,258

4. (currently amended): The <u>UWB ultra wide band</u> receiver of claim 3, further comprising an MAC for storing information on the detected band and transmiting the stored information on the band to other <u>UWBultra wide band</u> receivers.

- 5. (currently amended): The <u>UWB ultra wide band</u> receiver of claim 4, wherein the information on the band is transmitted through a management frame.
- 6. (currently amended): The UWB <u>ultra wide band</u> receiver of claim 4, wherein the information on the band is stored in a physical layer header.
  - 7 8 (deleted)
  - 9. (withdrawn): A UWB transmitter, comprising:

at least one communication module with limited working bands whose on/off states can be controlled,

wherein the UWB transmitter controls the on/off states of the at least one communication module to filter out a radio transmission signal in a corresponding band.

- 10. (withdrawn): The UWB receiver of claim 9, wherein the band comprises a frequency at which interference is expected.
  - 11. (withdrawn): The UWB transmitter of claim 9, further comprising:
- a baseband controller for controlling the on/off state of the at least one communication module and to control transmission of the radio transmission signal in the band.
- 12. (withdrawn): The UWB transmitter of claim 11, wherein the baseband controller comprises a power control unit for controlling intensity of transmission power of the radio transmission signal based on a specific frequency band.
- 13. (withdrawn): The UWB transmitter of claim 9, wherein the at least one communication module comprises a band stop filter.

Application No.: 10/828,258

14. (withdrawn): The UWB transmitter of claim 9, wherein the at least one communication module comprises a small signal amplifier.

15. (currently amended): A <u>UWB ultra wide band</u> transceiver, comprising: a plurality of at least one communication modules;

wherein the UWB ultra wide band transceiver is adapted to detect power intensity of a radio receive signal by bands according to on/off states of the at least one plurality of communication modules with a predetermined limited working bands, and,

further adapted to control the on/off states of the <u>plurality of at least one</u> communication modules based on the detection result, to filter out a radio receive/transmission signal in a corresponding band

wherein the said plurality of communication modules are a plurality of band stop filters or a plurality of small signal amplifiers.

- 16. (currently amended): The UWB ultra wide band transceiver of claim 15 wherein the band comprises a frequency at which interference is expected.
- 17. (currently amended): The UWB <u>ultra wide band</u> transceiver of claim 15, comprising:

a baseband controller adapted to control the on/off states of the at least one plurality of communication modules, and

further adapted to detect the power intensity of the radio receive signal in accordance with the control, and to control the on/off states of the <u>plurality of at least one</u> communication modules according to the detection result.

18. (currently amended): The UWB ultra wide band transceiver of claim 17, wherein the baseband controller comprises a power control unit for controlling intensity of transmission

Application No.: 10/828,258

power of the radio transmission signal according to a signal to noise ratio (SNR) of the radio receive signal.

19. (currently amended): The UWB ultra wide band transceiver of claim 17, further comprising an MAC for storing information on the band and transmitting the stored information on the band to other UWBultra wide band receivers.

20. (currently amended): The UWB ultra wide band transceiver of claim 19, wherein the information on the band is transmitted through a management frame.

21. (currently amended): The UWB ultra wide band transceiver of claim 19, wherein the information on the band is stored in a physical layer header.

22 - 23 canceled

24. (currently amended): A method of receiving UWB ultra wide band signals, comprising:

detecting power intensity of a radio receive signal according to on/off states of <u>a plurality</u>

<u>of at least one</u> communication module<u>s</u> with <u>a limited working bands;</u>

controlling the on/off states of the at least one plurality of communication modules in accordance with the detection result; and

filtering out the radio receive signal in the band[[.]],

wherein the said plurality of communication modules are a plurality of band stop filters or a plurality of small signal amplifiers.

25. (original): The method of claim 24, wherein the band comprises a frequency at which interference is expected.

Application No.: 10/828,258

26. (currently amended): The method of claim 24, wherein the step of controlling the on/off states of the at least one plurality of communication modules includes setting the on or off state according to the detection result of the power intensity.

27. (withdrawn): A method of transmitting UWB signals, comprising: controlling on/off state of at least one communication module; and filtering out a radio transmission signal in a band.

28. (withdrawn): The method of claim 27, wherein the step of controlling the on/off state of at least one communication module further includes:

setting on/off state of the communication module and

making an agreement on the determination result with at least one other communicating UWB receiver.

29. (withdrawn): The method of claim 28, wherein the step of making an agreement on the determination result includes:

storing information on the determination result; and transmitting the stored information to the other UWB receiver.

30. (currently amended): A method of transceiving UWB ultra wide band signals, comprising:

detecting power intensity of a radio receive signal according to on/off states of <u>a plurality</u> of <u>at least one</u> communication modules with <u>a limited working bands</u>;

controlling the on/off states of the <u>plurality of at least one</u> communication module  $\underline{a}$  in accordance with the detection result; and

filtering out a radio receive/transmission signal in a band[[.]];

Application No.: 10/828,258

wherein the said plurality of communication modules are a plurality of band stop filters or a plurality of small signal amplifiers.

31. (currently amended): The method of claim 30, wherein the step of controlling the on/off states of the plurality of communication modules includes:

setting on/off state of the at least one communication module according to the detection result of the power intensity; and

making an agreement on the determination result with at least one other communicating <a href="https://www.ultra.wide.band"><u>UWB ultra.wide.band.w</u>

32. (currently amended): The method of claim 31, wherein the step of making an agreement on the set result includes:

storing information on the determination result; and

transmitting the stored information to the other UWB ultra wide band receiver.